WHAT IS CLAIMED IS:

1. An optical information recording medium comprising:

a substrate having successively disposed thereon a light-reflective layer, a recording layer and a cover layer,

wherein information can be recorded on and reproduced from the recording layer by irradiating a laser beam from a side at which the cover layer is disposed, and a surface of the light-reflective layer at a side at which the recording layer is disposed has a central surface average roughness SRa of 30 nm or smaller and a number of projections having a height from a reference plane of 50 nm or greater, as determined with an atomic force microscope (AFM), of 30 (number/90 μm angle) or less.

2. The optical information recording medium according to claim 1, wherein the substrate comprises a material selected from the group consisting of an acrylic resin, a vinyl chloride resin, an epoxy resin, an amorphous polyolefin, a polyester and a metal.

3. The optical information recording medium according to claim 1, wherein the substrate comprises at least one of an amorphous polyolefin and a polycarbonate.

4. The optical information recording medium according to claim 3, wherein the substrate has a thickness of 1.1 ± 0.3 mm.

5. The optical information recording medium according to claim 1,

wherein the substrate includes a pre-groove having a track pitch of 200 to 400 nm and a groove depth of 20 to 150 nm.

6. The optical information recording medium according to claim 1, wherein an undercoat layer is disposed on a surface of the substrate at a side thereof at which the light-reflective layer is disposed.

7. The optical information recording medium according to claim 6, wherein the undercoat layer has a thickness of 0.005 to 20 μm.

8. The optical information recording medium according to claim 1, wherein the light-reflective layer contains a light-reflective material having a reflectance of 70% or more with respect to a laser beam.

9. The optical information recording medium according to claim 8, wherein the light-reflective material contains at least one element selected from the group consisting of Mg, Se, Y, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Mn, Re, Fe, Co, Ni, Ru, Rh, Pd, Ir, Pt, Cu, Ag, Au, Zn, Cd, Al, Ga, In, Si, Ge, Te, Pb, Po, Sn and Bi.

10. The optical information recording medium according to claim 8, wherein the light-reflective material is Au, Ag, or an alloy containing Au or Ag as a main component.

11. The optical information recording medium according to claim 8,

wherein the light-reflective layer is formed by a method selected from the group consisting of a vapor deposition method, a sputtering method and an ion-plating method.

12. The optical information recording medium according to claim 1, wherein the central surface average roughness SRa is from 0.25 to 10 nm.

13. The optical information recording medium according to claim 1, wherein the central surface average roughness SRa is from 0.25 to 2.5 nm.

14. The optical information recording medium according to claim 1, wherein the number of projections having a height from a reference plane of 50 nm or greater, as determined with an atomic force microscope (AFM), is 15 or less.

15. The optical information recording medium according to claim 1, wherein the number of projections having a height from a reference plane of 50 nm or greater, as determined with an atomic force microscope (AFM), is 5 or less.

16. The optical information recording medium according to claim 8, wherein the light-reflective layer has a thickness of 10 to 250 nm.

17. The optical information recording medium according to claim 1, wherein the recording layer contains at least one of a Ge-Sb-Te alloy and an Ag-In-Sb-Te alloy as a recording material.

18. The optical information recording medium according to claim 1, wherein the recording layer contains a compound selected from the group consisting of triazole, triazine, cyanine, merocyanine, aminobutadiene, phthalocyanine, cinnamic acid, viologen, azo, oxonol, benzoxazole and benztriazole.

19. The optical information recording medium according to claim 1, wherein the recording layer has a thickness of 20 to 500 nm.

20. The optical information recording medium according to claim 19, wherein the recording layer contains a singlet oxygen quencher as an anti-fading agent.